UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

SENT VIA EMAIL AS PDF

August 4, 2016

Kevin S. Milligan, P.E.
Deputy General Manager
Riverside Public Utilities
3750 University Avenue, 3rd floor
Riverside, CA 92501

Subject: Rockets, Fireworks, and Flares Superfund Site

Dear Mr. Milligan:

We have reviewed your letter dated May 4, 2016, which followed up on a meeting we had in Riverside on April 20, 2016. Your letter makes six requests. We have summarized and provide a response to each of your requests.

Request #1. "Lower the Method Detection Limit to 0.5 ug/L for analysis for perchlorate in monitoring and other wells being sampled in OU-2."

EPA Response: Groundwater sampling in OU-2 has, since 2013, been conducted by United Technologies Corporation in accordance with a February 26, 2013 Administrative Settlement Agreement and Order on Consent (AOC) with EPA and EPA-approved planning documents. The perchlorate analyses have made use of an EPA analytical method (EPA Method 314) and a method detection limit (MDL) at or below 0.65 ug/L. We believe that MDLs in this range, many times less than the drinking water standard of 6 ug/L, provide adequate sensitivity. The basis for the MDL and other sampling protocols and parameters, and quality control requirements for UTC sampling and analysis work, are described further in a detailed site-specific work plan and sampling and analysis plan dated July 3, 2013. We will provide a copy of the plan if requested. Field and laboratory methods, including the analytical method and laboratory required method detection limit for each analyte, were chosen after careful consideration of the sampling and data quality objectives.

Request #2. "Increase sampling frequency for monitoring and other wells in OU-2."

EPA Response: EPA currently requires annual sampling of approximately 80 wells or well depths in operable unit 2 (OU-2) of the RFF site (the downgradient portion of the site). We have not seen changes in results to date to warrant increasing the sampling frequency, but will reconsider if conditions change. Perchlorate concentrations at the two furthest downgradient monitoring wells (PW 13 and PW14) have been relatively stable since they were installed in 2014. We expect results from the 2016 annual sampling event (scheduled to be completed last week) to be available later this summer.

Sampling frequencies for active public water supply wells such as the Colton 15 and Colton 17 wells are set by the California Division of Drinking Water.

Request #3. "Provide Riverside copies of the recent isotopic analysis of Colton-17."

EPA Response: We are separately providing a report summarizing the results of an analysis of a groundwater sample collected from the Colton 17 water supply well for chlorine and oxygen stable isotopes. We note that the perchlorate concentration in the sample that underwent isotopic analysis was less than we have typically seen at that location, making it uncertain whether the synthetic/Chilean perchlorate fractions are representative of conditions at that location. We have requested that a second sample be collected from Colton 17 for isotopic analysis this summer or fall. UTC is currently discussing access arrangements with the well owner (the city of Colton).

Request #4. "Initiate additional investigation and perchlorate sampling in the Rialto-Colton basin beyond OU-2 as well as the Northerly portion of North Riverside basin in the area of Riverside's Flume Wells, including installation of new monitoring wells."

EPA Response: We have requested that UTC install two new groundwater monitoring well clusters downgradient of existing groundwater monitoring wells PW13 and 14. We expect multiple completion depths at each location. Drilling of the first cluster is tentatively scheduled to begin in September. The location of the second cluster will be determined after water level data are available for the first cluster. UTC will also collect a second set of groundwater samples from the Colton 15 and Colton 17 water supply wells for perchlorate (i.e., oxygen and chlorine) isotopic analysis. The Colton 15 and Colton 17 wells were both previously analyzed for perchlorate isotopes. A report with the Colton 15 results is dated March 2015, with sample collected in 2010. A report with the Colton 17 results is dated May 2016, with the sample collected in August 2015.

Request #5. "Initiate additional isotopic sampling of additional wells in the downgradient direction of Colton-17 as depicted on recent isocontour maps, including monitoring wells, private wells, and public wells."

EPA Response: See response to request #4.

Request #6. "Updated isotopic sampling of Colton-15 in light of new data from Colton-17."

EPA Response: See response to request #4.

Please feel free to contact me with any questions. I can be reached at praskins.wayne@epa.gov or 415-972-3181.

Sincerely,

Wayne Praskins
Project Manager

cc: Kurt Berchtold, Santa Ana Regional Water Quality Control Board
Rafat Abbasi, California Department of Toxic Substances Control